

An Overview of Policies, Tools and Options for Stimulating Delaware's Renewable Energy Markets

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Today's Discussion

1. State policies that can drive renewable development
2. Tools that are available to procure renewable resources
3. Options that support the growth and development of Delaware resources

The Renewable Portfolio Standard

- Ensures specific quantity of renewable energy resources within the region*.
- May provide economic development opportunities, but not necessarily in-state.
- Generally supports lowest cost renewable energy options except for carve-outs.
- Diversified renewable supply depends on implementation of carve-outs.

* Assuming no compliance payments

Integrated Resource Planning

- Provides the opportunity to set a broader resource selection criteria for renewable energy options, beyond lowest cost.
- Provides more flexibility for achieving the renewable options, which can include diversification.
- Does not necessarily guarantee a set level of renewable resources without adopting hard targets.

Feed-in Tariffs

- Provides known, declining flexible rate incentive to secure renewable energy resources.
- Enables technology by technology pricing options and can help to maintain a level playing field by resource type.
- Does not guarantee diverse renewable supply even with carve-outs.
- May be more expensive to ratepayers unless incentive costs are balanced with RPS compliance costs.

Standard Offer Service (SOS) Rate Option(s)

- Provides opportunity for market demand to drive renewable resource needs.
- Can provide cost based, diverse renewable supply depending on offering arrangements.
- Provides opportunity for educating consumers about the true cost of renewables.
- May have limited participation based on pricing structures and perceived benefits.
- Voluntary option does not guarantee set levels.

Grant and Loan Programs

- Provides opportunity to encourage a variety of types of renewables.
- Depending on the program arrangements, grants and loans can simplify consumers process for acquiring renewable energy systems.
- Requires sustainable funding sources and program management.
- Voluntary program does not guarantee set levels.

Federal and State Tax Incentives

- Can be designed to increase development of specific renewable resources.
- Reduces tax revenue via accelerated depreciation, Investment Tax Credit (ITC) or other incentives.
- Is dependent on recipients income and may work in favor of larger companies instead of the smaller start-ups (nothing for gov't/non-profits).
- Doesn't guarantee set levels of resources.

Procurement Tools to Secure Required Resources

Procurement Process Assumptions

- Has defined specific known resource requirement.
- Resource requirement may be bundled, partially bundled or unbundled (capacity, energy, ancillary services, recs)
- May consider short, mid and long-term contract options for various attributes.

Request For Proposals (RFP) and Power Purchase Agreements (PPA)

- Provides both parties flexibility to acquire their needs at a negotiated price and contract duration.
- Provides opportunity for resource acquisition to consider elements beyond lowest price.
- Provides opportunity to assess reasonableness of proposals and related vendor risk.
- Can take longer to complete the resource acquisition process.
- Offers opportunity for public and press intervention (good and bad).
- May require specific expertise to ensure a fair/equitable outcome.

Auctions and Reverse Auctions

- Designed to secure resources at lowest price.
- May require multiple specific auctions or segmented requirements to secure a diversified portfolio or various attributes.
- Requires significant in-house resources or external auction manager/platform
- Requires review and validation that the auction was competitive.
- Provides quicker access to needed resources.

Sole Source Negotiations

- Provides fastest process to achieve desired result.
- Can creates issues around process fairness.
- May not lead to best overall result.
- May not be best option in a competitive markets environment.

REC Multipliers

- REC multipliers can procure specific additional resources and function as incentive.
- Provides mechanism to stimulate in-state development versus region wide.
- Voluntary use doesn't guarantee a set level of resources compared to carve-out requirements.
- Can dilute REC market prices throughout the region.

Market Options to Enhance REC Trading & Support Delaware Renewable Growth

What Options Are Available?

- Support/request enhancements to PJM GATS for wholesale REC transactions.
- Create in-state REC registry for smaller retail generators with set market based price.
- Provide incentives or REC premium for REC aggregator businesses.
- Create utility/SEU full turnkey renewable service offerings.
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